

CLAIMS

I claim:

1. A wireless communication system, comprising
a repeated pattern of cells, each cell having a base
station;

a user station;

wherein base station transmitters and user station
transmitters in a cell are assigned a spread-spectrum code for
modulating radio communication in that cell;

whereby radio signals used in that cell are spread
across a bandwidth sufficiently wide that both base station
receivers and user station receivers in an adjacent cell may
distinguish communication which originates in one cell from
another; and

whereby said codes are each reused in a plurality of
cells.

2. A wireless communication system as in claim 1,
wherein said repeated pattern comprises a three-dimensional
configuration.

3. A wireless communication system as in claim 1,
wherein said repeated pattern comprises the pattern shown in
figure 1.

1 4. A wireless communication system in claim 1,
2 wherein said user station transmitters emit data communication
3 messages which include station identification information.
4

5 5. A wireless communication system as in claim 1,
6 wherein said codes are assigned dynamically for each cell.
7

8 6. A wireless communication system as in claim 1,
9 wherein said codes are assigned dynamically for each cell by each
10 of a plurality of independent communication systems, after
11 accounting for use by other systems.
12

13 7. A wireless communication system as in claim 6,
14 wherein said use is concurrent use.
15

16 8. A wireless communication system as in claim 6,
17 wherein said use is prior use.
18

19 9. A wireless communication system as in claim 1,
20 wherein said codes comprise a set of codes with minimal cross-
21 correlation attribute.
22

23 10. A wireless communication system as in claim 1,
24 wherein said codes comprise a limited number of
25 predetermined codes; and
26

27 wherein said cells are arranged in a repeated pattern
28 of three cells.

1 11. A wireless communication system as in claim 10,
2 wherein said limited number is three.
3

4 12. A wireless communication system as in claim 10,
5 further comprising time division and frequency division.
6

7 13. A wireless communication system as in claim 12,
8 wherein a plurality of frequencies are assigned dynamically.
9

10 14. A wireless communication system as in claim 12,
11 wherein a plurality of frequencies are assigned dynamically by
12 each of a plurality of independent communication systems, after
13 accounting for use by other systems.
14

15 15. A wireless communication system as in claim 14,
16 wherein said use is concurrent use.
17

18 16. A wireless communication system as in claim 14,
19 wherein said use is prior use.
20

21 add B17
22
23
24
25
26
27
28